Cockatoos

Introduction

This display provides an overview of the superfamily of birds known as Cockatoos (Cacatuoidea).

Section (Number of pages)		tion (Number of pages)	Page Number	
	1.	Cockatoo Family Trees (3)	2	
	2.	Types of Cockatoo (5)	5	In the card below, the Cockatoos are the two birds with crests. The Palm Cockatoo is the black bird. The Sulphur-crested Cockatoo is the white bird. They and the other birds are members of the order <i>Psittaciformes</i> (Parrots).
	3.	Morphology and Behaviour (3)	10	
	4.	Distribution and Habitat (2)	13	
	5.	Relationship with Humans (2)	15	

Palm Cockatoo and Sulphur-crested Cockatoo with other members of the Order Parrots



References

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1. Cockatoo Family Trees

1.1 Relationship of Cockatoos with Birds and Other Parrots.

Phylogeny is the evolutionary relationship of biological species with one another. The diagram below shows the parrot superfamilies, including that of the cockatoos, and how they are related to other birds.

Cockatoos (*Cacatuoidea*) are one of three superfamilies in the order Parrots (*Psittaciformes*).

The Blue Crane is in the order of "crane-like" birds, the *Gruiformes*. They and the Parrots are part of a clade consisting of all modern birds, the *Neoaves*.

Class: Birds Aves

O,50

Cockatoos and macaws are in the same order.

Order: Parrots

Psittaciformes





Parrot Superfamilies

New Zealand Parrots Strigopoidea

The ancestors of New Zealand Parrots formed the earliest superfamily. These are a Kea and a Kaka.



Red orange

Other Birds Aves



Cockatoos Cacatuoidea



True Parrots

Psittacoidea



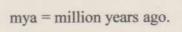
The bird above is a Cape Wagtail. This bird is in the order of perching birds (*Passeriformes*). Like cockatoos and other parrots they are capable of vocal learning.

1. Cockatoo Family Trees

1.2 The Cockatoo Family and Subfamilies

There is only one family in the superfamily Cacatuoidea (Cockatoos), the Cacatuidae (the English name is the same, Cockatoos). The family contains three subfamilies. This diagram

shows how they are related to one another.



33.5 mya Cockatoos Cacatuidae 22.2 mya

Cacatuidae diversified into subfamilies as their climate became more arid.

21.6 mya

Palm and White Cockatoos Cacatuinae

19.3 mya

Black Cockatoos Calyptorhynchiae

\$4.50

ENDANGERED BIRDS

15.2 mya

Palm Cockatoo Probosciger aterrimus

Cockatiels Nymphicinae

Red Tailed Cockatoo Calyptorhynchus banksii



Cockatiel Nymphicus hollandicus



Nymphicus is the only genus and hollandicus the only species in the Nymphicinae subfamily.

Sulphur-crested Cockatoo Cacatua galerita



The nodes represent the time at which the ancestors of cockatoos became distinct from other parrots and when the ancestors of the three subfamilies diversified.

1. Cockatoo Family Trees

1.3 The Cacatuinae Tribes

One of the subfamilies of cockatoos, the *cacatuinae*, formed two tribes; the Palm Cockatoos (*Microglossini*) and the White Cockatoos and allies (*cacatuini*).

21.6 mya

Palm and White Cockatoos Cacatuinae

19.3 mya

White Cockatoos and allies Cacatuini

Palm Cockatoos Microglossini 14.6 mya

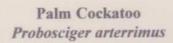
White Cockatoos and Allies Cactuini



These four birds (left and below) are White Cockatoos (*Cacatua*).

The species on the right and immediately below are Sulphur-crested Cockatoos.

The two species below are Yellow-crested Cockatoos.











Probosciger is the only genus in the Microglossini tribe.



Orange



Orange-brown

Some of the birds in the *cacatuini* tribe have pink plumage, like the Major Mitchell's Cockatoos above.

The parrot superfamilies are divided into families, sub-families and tribes, with the genera and species distributed amongst them.

There is only one family in the cockatoo superfamily (*Cacatuoidea*); the Cacatuidae. Within this family there are three subfamilies, which are listed below in order of their philology, i.e. the order in which their ancestors evolved.

2.1 Nymphicinae

There is only one genus and species in this subfamily, the Cockatiel (Nymphicus hollandicus).

Cockatiel (Centre) and True Parrots Nymphicus hollandicus et Psittacoidea

This is the earliest and smallest of the Cockatoos, They are 30 to 33 cm (12 to 13 in) long.

The bright orange cheek patch on a white background indicates that this bird is a male.



This Cockatiel has the characteristic plumage of the wild bird.

Cockatiel
Nymphicus hollandicus



The blue tinge of this Cockatiel's plumage suggests that it was bred in captivity. Blue is one of 22 colour mutations.

2.2 Calyptorhynchinae

This is a subfamily of dark cockatoos that has one genus. There are five species belonging to two subgenera listed below.

2.2.1 Calyptorhynchus - Black and Red Cockatoos.

Red-tailed Black Cockatoo Calyptorhynchus banksii Glossy Black Cockatoo Calyptorhynchus lathami

C. bankssi have large powerful bills that can cut a brazil nut quickly and easily, shearing it like a laser.





The population c. lathami on Kangaroo Island, Australia, are under threat from the 2019-2020 bush fires

2.2.2 Zanda - Black and Yellow/White Cockatoos.

Yellow-tailed Black Cockatoo Calyptorhynchus funereus



Funerous refers to the birds' dark plumage; as if dressed for a funeral.

Carnaby's Black Cockatoo
Calyptorhynchus latirostris

Baudin's Black Cockatoo Calyptorhynchus baudinii

Latirostris prefer to breed in the southwest Australia where rainfall is over 300 mm/year.





Baudin's or Longbilled Black Cockatoos occupy a smaller range of southwest Australia than Latirostris.

2.3 Cacatuinae

The third subfamily contains the black palm and white/pink/grey cockatoos. There are two tribes listed below.

2.3.1 Microglossini.

The Palm Cockatoo is the only species in the Microglossini tribe. It is also known as the Goliath Cockatoo, because of its large size of 55 to 60 cm.

Palm Cockatoo
Probosciger aterrimus









Helio-Vaugiraud Proof 1949

2.3.2 Cacatuini.

The Cacatuini tribe contains four genera. These are listed below.

2.3.3.1 Callocephalon.

There is just one species, the *Callocephalon* fimbriatum, the Gang-gang cockatoo.

Gang-gang Cockatoo Callocephalon fimbriatum



This is the earliest species of *cacatuini* to evolve., the grey colour indicating close kin with earlier black cockatoos.

The Galah (right) and Major Mitchell's Cockatoo (below) are seen as early offshoots of white cockatoos that have retained their pink colour.

2.3.3.2 Eolophus.

The only species is *Eolophus roseicapilla*, the Galah.

Galah Cockatoo Eolophus roseicapilla



2.3.3.3 Lophochroa.

There is again just one species, Lophochroa leadbeateri. This bird is known as Leadbeater's or Major Mitchell's Cockatoo

Lophochroa leadbeateri



2.3.3.4 Cacatua.

The Cacatua genus of mostly white cockatoos is divided into two sub-genera. These are listed below.

2.3.3.4.1 Licmetis - Corellas.

There are six species of Corellas, two of which are illustrated in the stamps below.

Red-vented cockatoo Cacatua haematuropygia

Native to the Philippines, Redvented Cockatoos are also known as Kalangays.





The population is critically endangered due to trapping for the caged bird trade.



Ducorp's or Solomon's cockatoos are one of the smaller cockatoos

(30 cm long).

Ducorp's Cockatoo

Cacatua (Licmetis) ducorpsii



24 May 1965



Watermark sideways 1966



Watermark upright 14 Feb 1966

Long-billed Corella
Cacatua (Licmetis) tenuirostris

Native to Australia this Corella uses its bill to dig for roots and seeds.



2.3.3.4.2 Cacatua - true white cockatoos.

There are five species of true white cockatoos, three of which are illustrated in the stamps below.

Sulphur-crested cockatoo Cacatua (cacatua) galerita



The Sulphur-crested Cockatoo does not have the yellow or orange cheek patches seen in the Yellow-crested Cockatoos below.

Yellow-crested cockatoo Cacatua (cacatua) sulphurea







The two birds on the right are probably members of the sub-species *Citroncristata* or Citron-crested Cockatoo.

Salmon-crested Cockatoo Cacatua (cacatua) moluccensis

Also known as the Moluccan Cockatoo this bird is endemic to Saram in Indonesia. It is among the largest of the white cockatoos (46 -55 cm long).



3. Morphology and Behaviour

3.1 Feet, Crests and Plumage

Cockatoos (Cacatuoidea) and Parrots (Psittaciformes) possess zygodactyl feet (two toes in front and two behind) which allow them to

Palm Cockatoo on a Perch Probosciger arterrimus

.....not only perch.



Sulphur-crested Cockatoo holding food.

.....but grasp, items such as food.



Cockatoos also have features that distinguish them from other parrots.

They have a crest which they can control for display and raising the alarm.

Sulphur-crested Cockatoo raising its crest.



Palm Cockatoo showing off its crest



Most cockatoos have white, grey or black feathers.

Black Cockatoo Feather



The Galahs spread pigment dye across their feathers. which combined with melanin produces the deep pink colour.

Galah with Pink Colouration



Cockatoos do not possess the Dyck texture that causes the blue and green feathers seen on most other parrots.

Red and Green Macaw Ara chloroptera



3. Morphology and Behaviour

3.2 Group Behaviour

Sulphur-crested cockatoos Cacatua (cacatua) galerita



Many species such as the Sulphurcrested Cockatoo and Galahs travel around and feed in large flocks.

Galah Eolophus roseicapilla



Grey dash above "L" of "AUSTRALIA" on the top stamp. Helecon paper grey cylinder variety LrSh 3/7.

Sulphur-Crested Cockatoo in a Tree Cacatua (cacatua) galerita

When the flock is on the ground feeding, there is often another bird up in a tree or perched high up keeping guard. This bird will call loudly if a predator is seen.



3. Morphology and Behaviour

3.3 Diet

Cockatoos have a wide ranging diet that consists of mainly nuts

Sulphur-crested Cockatoo Eating a Walnut Cacatua (cacatua) galerita



.... and seeds.

Galah Eating Seeds Eolophus roseicapilla

Cockatoos, like other parrots, will often invite other birds and humans to preen their head feathers by indicating them with a foot.



The diet of the Palm Cockatoo includes the fruit of the Pandanus tree. Palm Cockatoo











4. Distribution and Habitat

4.1 Country of Origin and Favoured Habitat

Sulphur-crested Cockatoos flying amongst Eucalyptus Trees

All of the cockatoos reside in Australasia and many are indigenous to Australia.



They usually prefer areas where there are trees to provide nest sites and food.

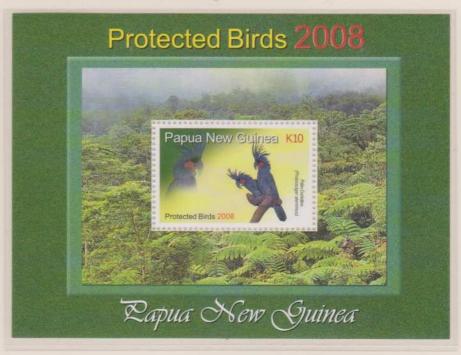
Some species such as the Sulphur-crested Cockatoo are widespread across Australia.

Sulphur-crested Cockatoos and Plane Trees



This is because they can tolerate areas with fewer trees.

Palm Cockatoo and the Rainforest Probosciger aterrimus



Other species are restricted to parts of Australia or a few islands in Indonesia.

Ducorp's Cockatoo Cacatua (Licmetis) ducorpsii



For instance the Ducorp's Cockatoo is only found on the Solomon Islands.

Red-vented Cockatoo Cacatua haematuropygia



...and the Red-vented Cockatoo is only found in the Philippines.

5. Relationship with Humans

5.1 Impact of Exploration

Human exploration and technology can lead to a reduction in suitable habitat for parrots, including cockatoos.

Galahs and the Explorers Hamilton Hume and Captain William Hovell



Cockatoos by an Airfield Cacatuidae



Galahs waiting for an opportunity to steal or beg some food from tourists.



However, several species are quite bold and can benefit from the presence of humans in their territory.

5.2 Cockatoos and the Arts.

Cockatoos feature in art.... and cartoons.

Galah

Eolophus roseicapilla

Major Mitchell's Cockatoo in a Batik Design







Sulphur Crested Cockatoo Cacatua galerita





5. Relationship with Humans

5.3 Pets

With care (some birds live a long time) and with training cockatoos make excellent pets, but they can be very noisy and demanding of attention and activity.

Boy with a Palm Cockatoo Probosciger aterrimus



Yellow 'Lutino' Cockatiel Nymphicus hollandicus



Humans breeding birds for aviaries and as pets have developed 22 colour mutations of cockatiels including yellow.